**Topic:** The Water Cycle/Global Warming

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**Grade Level:** 6th Grade

**Goals:** Students will observe and discuss the controversy concerning global warming. Based on their research they will determine if global warming is either fact of fiction.

**Essential Questions:**

* How does the green house affect our water cycle? (knowledge)
* Describe what happens when the sea level rises? (knowledge)
* Can you distinguish between fact of fiction when it comes to global warming? (comprehension)
* Can you write in your own words your perspective on the issue? (comprehension)
* What questions would you ask of Al Gore if he was present here today? (application)
* Can you compare your opinions with those presented in the text? (analysis)
* Can you see a possible solution to global warming? (synthesis)
* Is there a better solution than what you already know?(evaluation)

**Unit Summary:**

  The students will have an opportunity to have an understanding of how chemical energy affects plants by helping to build a greenhouse in the classroom. With this prior knowledge they will understand that there is a greenhouse effect here on earth. Also, that the natural greenhouse gases act like a big blanket around the earth and extra greenhouse gases mean that more heat gets trapped which will affect our water cycle on earth.

As students explore how the greenhouse gases affect our water cycle, they will know that the greenhouse effect keeps the earth comfortably warm by trapping heat in the atmosphere. Therefore, due to higher temperatures ice and snow will melt which could make the sea level rise. Also, summer rainfall might increase because of temperature rises, and coastal areas could flood because of sea level rises. The students will come to this conclusion through viewing movie clips, research, discussions and forming their own opinions. Therefore they should conclude this lesson with a grasp of the issues and concerns of how global warming might affect life and our water cycle on earth.

**Procedure**

* Building a classroom greenhouse
* Collaborate a classroom blog
* Classroom debates

**Materials:**

* Computers
* NBC clips, You tube clips
* KWL chart
* Rubric

**Subject Area(s): (list all subjects that apply)**

* Science
* Language Arts

**Connections:**

Students will come up with ideas of what they can do on their own, with a group in school, or surrounding neighbors in the community to bring awareness to others about global warming and what they can do to help stop it.

<http://library.thinkquest.org/06aug/00442/gwcommunity.html>

(*This link will be provided to them to give them suggestions*)

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| **Lesson Plan #** | **Lesson Plan Title** | **NBC archive related** |
| Lesson # 1 | **Is There a Greenhouse Effect On Earth, and If So How Does It Affect Our Water On Earth?** | <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=43934>  <http://archives.nbclearn.com/portal/site/k->  [12/collectionnavigator?cuecard=40383](http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=40383) |
| Lesson # 2 | **What Do You Know About Global Warming & What Climate Changes Could Occur In the Future?** | <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=41252>  <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=1406> |
| Lesson #3 | **Is Global Warming Fact or Fiction?** | <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=41208>  <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=2253> |
| Lesson #4 | **How to Express Your Point Of View Concerning Global Warming?** | <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=2144>  <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=3867> |
| Lesson #5 | **What Can We Do Here On Earth?** | <http://archives.nbclearn.com/portal/site/k-12/collectionnavigator?cuecard=42247> |